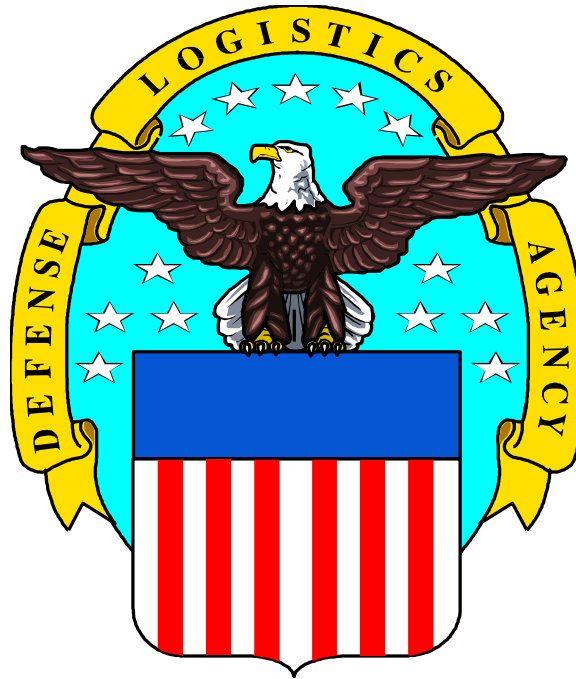# Supplier Quality Assurance Self/Group Briefing

**Prepared by DCMC-OB**

**September 30, 1999 (Rev. A)**

# Agenda

- Introductions
- Background
- Policy Overview
- SQA Chapter Review
  - risk planning
  - risk assessment (ratings)
  - risk handling (surveillance methods)
  - risk monitoring
  - risk documentation
  - authorizing/accepting shipments
  - record retention
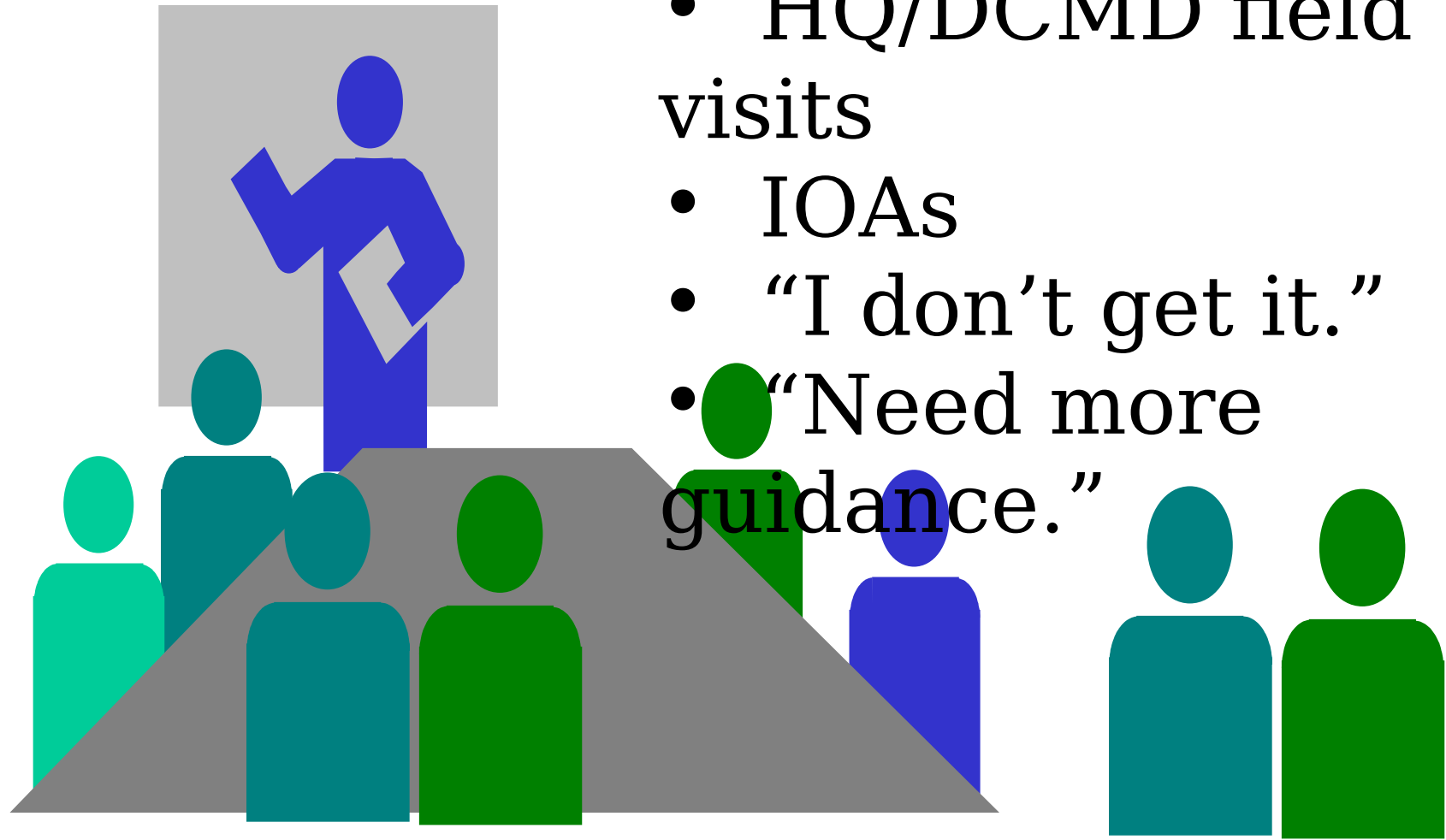  - competencies and qualifications
  - the "attachments"
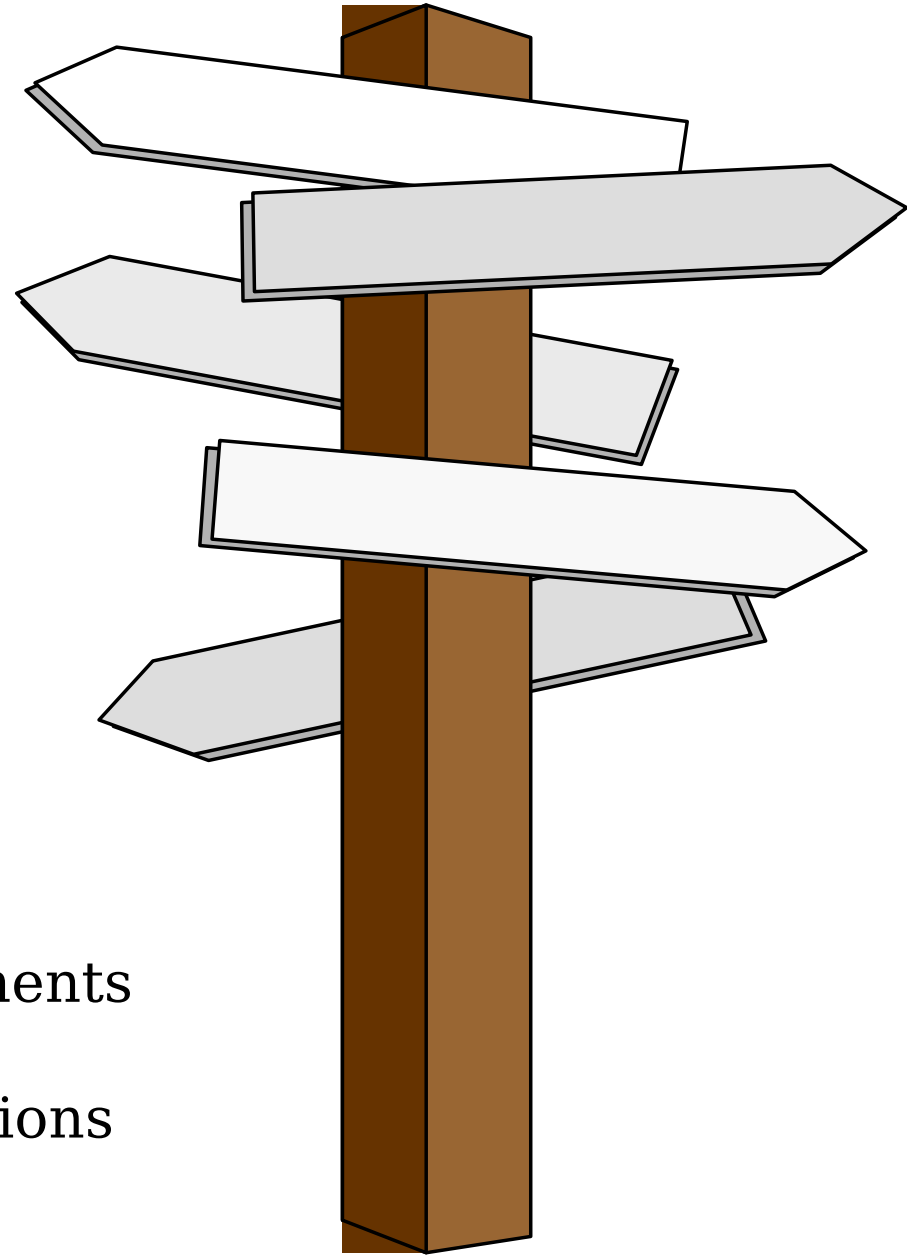
# **Background**

- FY 94 audit of DCMC
- Focus:  workload documentation
- How do we allocate time?
- Just decided to…
- Mediation-----Peace!
- The treaty: clarify policy
  - Risk-based decisions
  - Accountability
  - Implementation
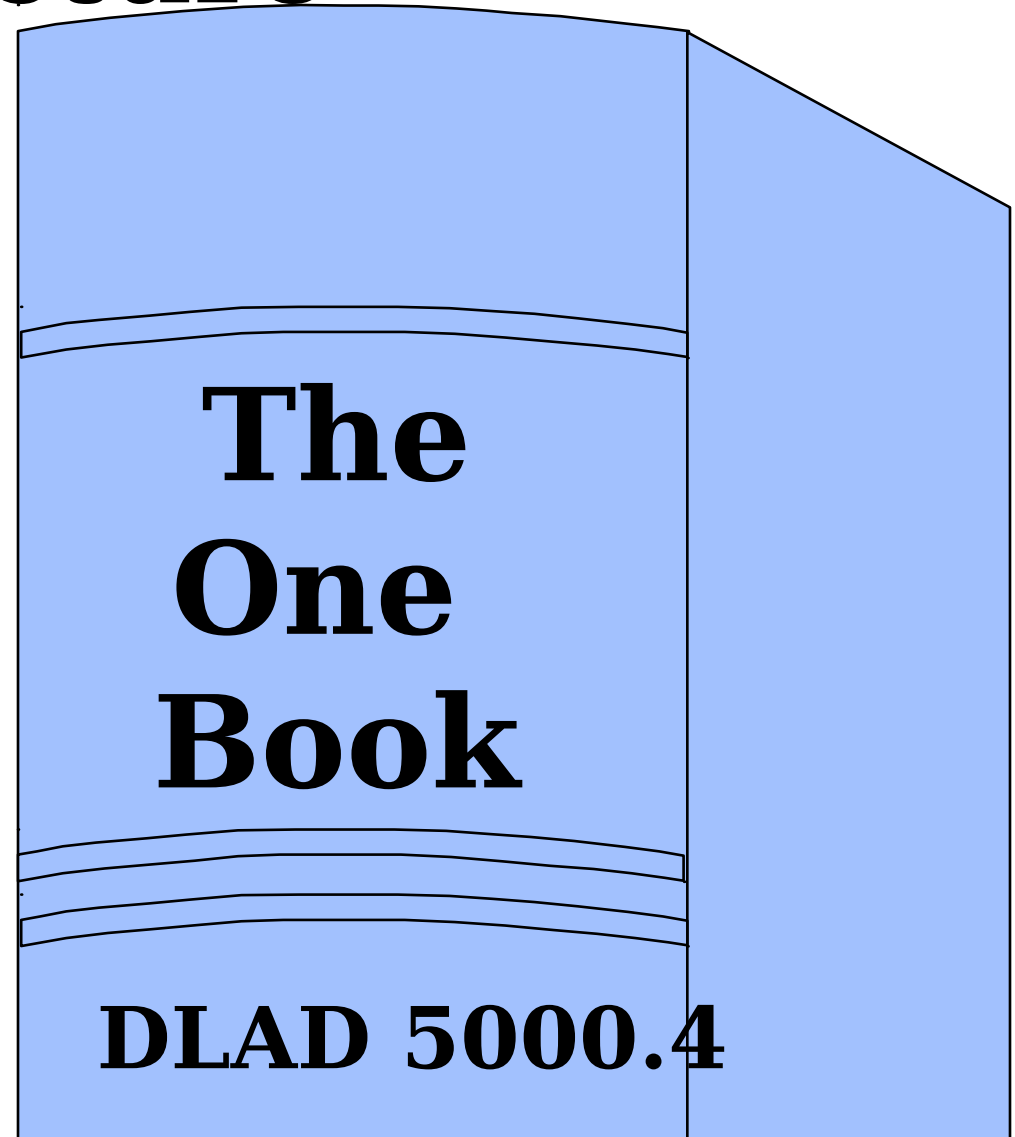
DoD IG
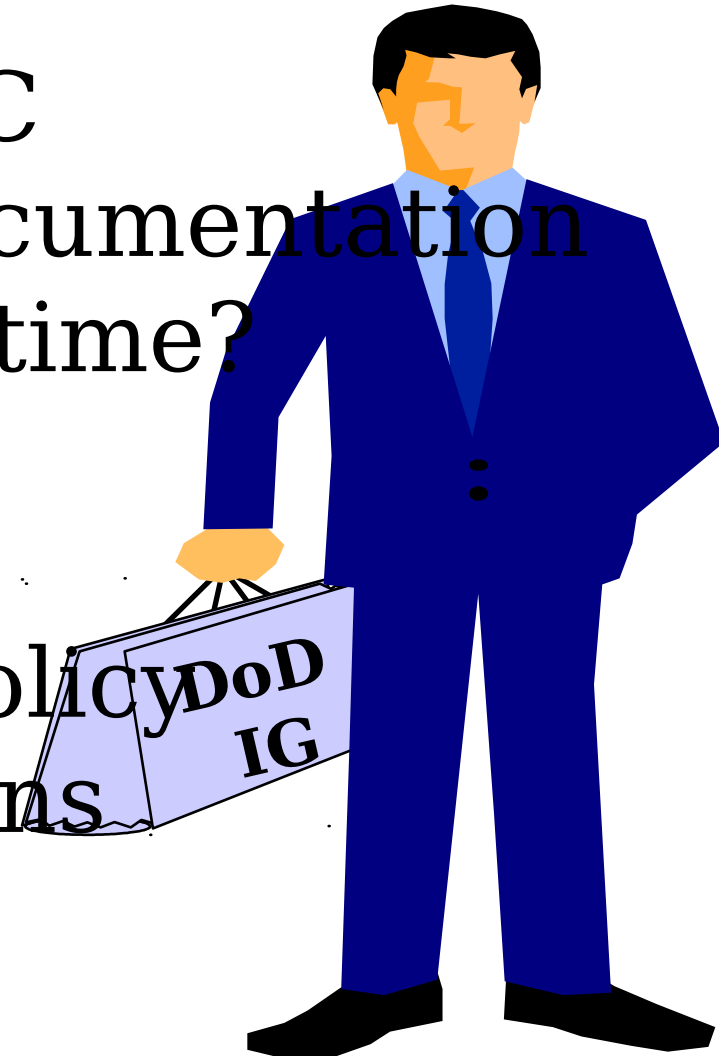
# Why a Self/Group Briefing?

- HQ/DCMD field visits
- IOAs
- "I don't get it."
- "Need more guidance."

# Policy Overview:  The Big Picture

- For specialists
- For supervisors
- Exceptions

**The One Book**

**DLAD 5000.4**

# Risk Planning (2 steps)

Certificate of conformance?

QALIs/delegations/MOUs, etc.

DEMIL?    Customer Support?    Commercial items?    QPL/QML/QSL?

**#1: Review contract/customer requirements**

First Articles?    Specialized safety?    Flight critical/safety of

Bulk Petroleum/Chemicals ?    Environmental concerns?

Product technical/quality requirements

Contractor plans for production

**#2: Identify key systems/processes/characteristics**

# Identify Key Processes

Key Process List
for
XYZ Welding Co.
1. Fusion welding
2. Resistance welding
3. Weld prep/clean
4. Assembly
5. Liquid Penetrant Insp.
6. Calibration

- What's a *key process* ?

- Definition

- Considerations

- Examples

- What about the little guy?

- Relying on your judgment!

# Risk Assessment (Ratings)

**(Where are we vulnerable?)**

- SQA Chapter defers to SRM chapter
- 3 factors: performance, schedule, cost
- Risk levels based on POF/COF, experience, history
  - **HIGH**: process out of control, major disruption highly probable
  - **MODERATE**: moderate process variance, adverse trend, doubts about process performance
  - **LOW**: confident requirements will be met, with no/minimal disruption

# Risk Handling

## (Selecting Surveillance Methods)

**3 Elements:**

**1. Quality System Risk Handling Methods**

- Quality system evaluation (higher-level)

**2. Process Risk Handling Methods**

- Process proofing
- Product audits
- Data analysis
- Alternatives: CoC, CSO, ARP

# Evaluate Contractor Quality System

- Applies to all "higher level" contracts
- Quality System Evaluations
  - Relying on existing data
  - Formal audit
  - Combination
- ISO, ANSI/ASQ 9000 models
- DCMC checklists
- Documentation
  - CAO records
  - Communicating results
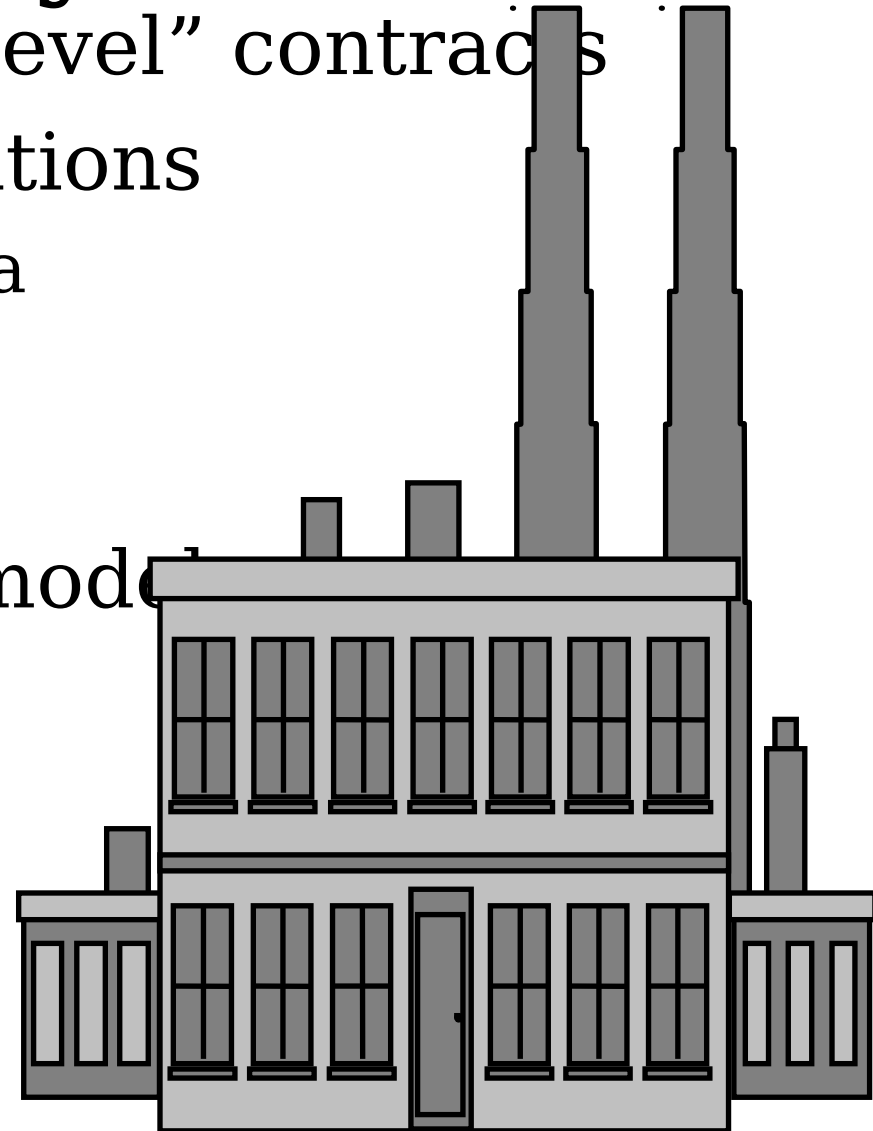
# Example:
# Quality System Qualification Statement

Quality System Qualification

Based upon a quality system evaluation,

ABC Electronic Widget Co.

Sparks, Kansas

is considered compliant with

ISO 9002

R. J. Cornish  5/12/99

Ralph  J. Cornish, LTC, USA,       Commander, DCMC Sparks

# Contractor Self-Oversight (CSO)

Alternative to direct DCMC oversight — Optional Tool

- Designated contractor reps do surveillance
- CAO, customers & contractor must agree
- DCMC-Contractor MOA
  - Schedule, reps, interaction, records, changes, withdrawal, expiration
- If CSO is used, surveillance plans must reflect
  - Which processes, surveillance tasks?
  - How the CAO will monitor

# Why Do I Need a Risk Handling Plan?

- Consistent framework
- Acquisition Reform
- Risk-based surveillance
- A trail to follow for substitut
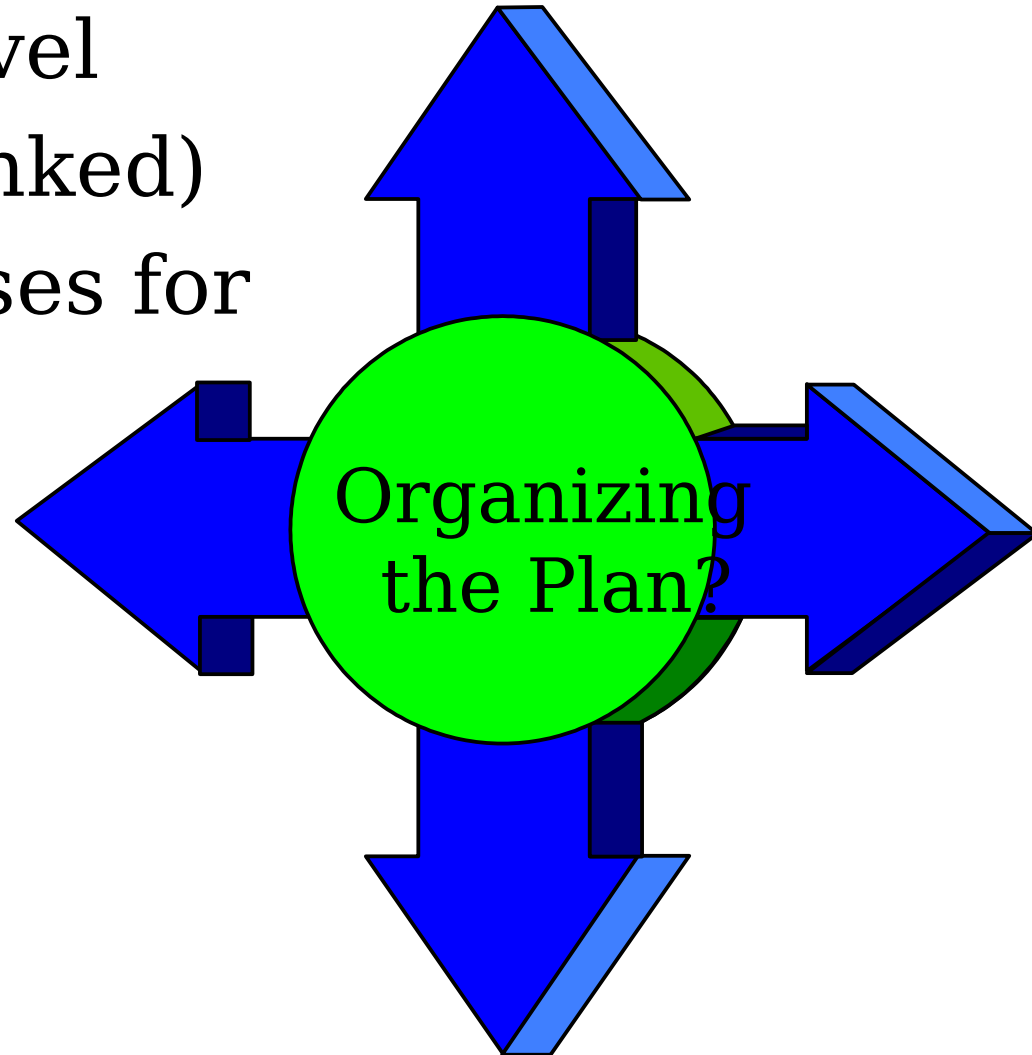- Ability to articulate risks
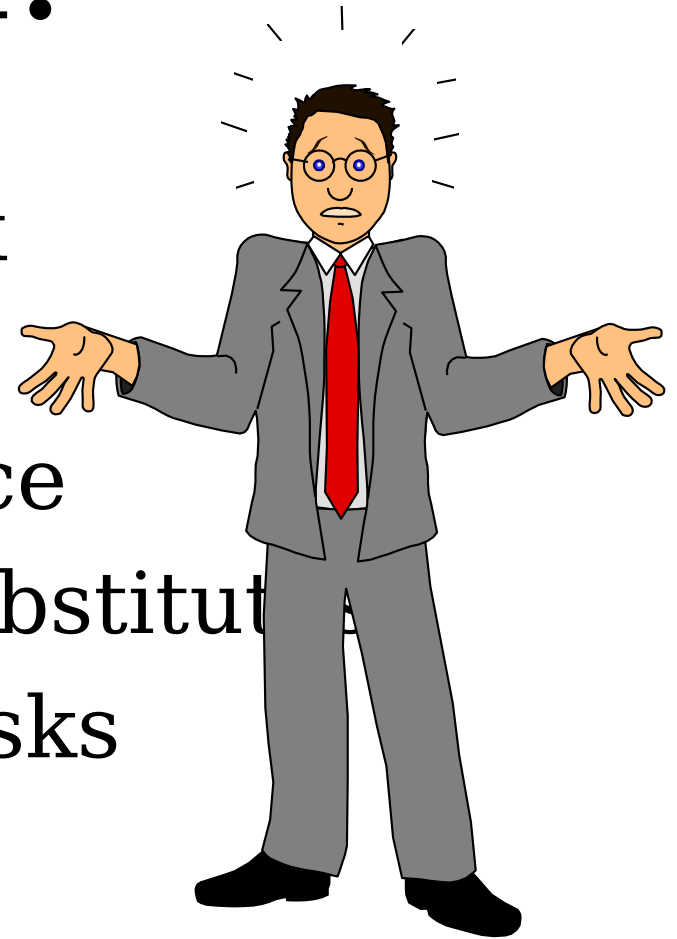
# Develop Written Risk Handling Plan

- What does it look like?
- Formality?
- General content?
- Length?
- What it is not!

# Structure of Risk Handling Plans

- Single vs. multi-level
- Single function (linked)
- Other example bases for structure
  - Program
  - Team
  - Product line
  - Contract

Organizing the Plan?

# Examples in a Plan

## Customer Input to Risk Handling P

CBA Inc., has 2 major military customers (DSCC and NSPCC) that almost always have active contracts at this plant and about 10 other military customers that come and go with sporadic contracts. To get customer input on surveillance planning, we telephone DSCC and NSPCC at least once every 6 months to discuss recent surveillance activities and results and the need (if any) for major changes in surveillance activities. Other customers are contacted when and if specific issues arise that call for DCMC-customer coordination. Records of customer contacts (conversation records) are maintained

# Examples in a Plan

## Customer Input to Risk Handling Plan #2

XYZ Corp., has 3 military customers (AVSCOM, TACOM, and MICOM) that always have active contracts at this plant.

Nearly continuous contact is maintained with technical personnel from the buying offices and the Program Office.   Program reviews are conducted quarterly at this plant and DCMC surveillance is discussed in detail immediately after each meeting.  Most of those

*"The Plan"*

meetings are documented in
Government copies of each meeting

# Examples in a Plan

## Medium Size Facility, Inc.

| Key Surveillance Process | Key-Process Rationale | Risk Level | Risk-Level Rationale | Surveillance Techniques | Intensity/Schedule |
|---|---|---|---|---|---|
| Fusion Welding 15-16-May 97 | Structural integrity | High | 2 PQDRs CY 97 | Proofing | Scheduled |
| Sampling [C=0. 1.5 AQL] | Defect fails system | | 2 CARs CY 97 | Product audit (LPI) | Lot |
| | | | Cause delinquency 5 MRBs CY 97 2 Waivers | Review data | Weekly |
| Key Surveillance Process | Key-Process Rationale | Risk Level | Risk-Level Rationale | Surveillance Techniques | Intensity/Schedule |
| Packaging & 20% of containers Marking | Identification important to customer | Mod | Formerly Out-sourced New process | Product audit Review data | Weekly |

# Examples in a Plan

## Tiny Plant, Inc.

| Key Surveillance | Key-Process | Risk | Risk-Level | Surveillance | |
|---|---|---|---|---|---|
| Process | Rationale | Level | Rationale | Techniques | Intensity/Schedule |
| Final Inspection Every shipment | Last control point | Mod | 0 PQDRs CY 97 | Product audit | |
| | | | 0 CARs CY 97 intermittent production | | |
| Key Surveillance | Key-Process | Risk | Risk-Level | Surveillance | |
| Process | Rationale | Level | Rationale | Techniques | Intensity/Schedule |
| Packaging & Monthly | Direct Shipments | Low | 0 PQDRs | Review data | |
| Marking units, semi-annually | FMS | | 0 RODs | Product audits | 2 |
| | | | Product audits defect free | | |

# Examples in the Plan

## Medium Size Facility, Inc.

| Key Surveillance | Process | Risk | Level | Surveillance | |
|---|---|---|---|---|---|
| Process | Rationale | Level | Rationale | Techniques | Intensity/Schedule |
| Powershaft honing | Finish Critical to performance<br><br>or<br>Replacement Cost | ? | 0 PQDRs 5 YRS<br>0 CARs CY 97<br><br>98% Yield<br>Defects scrapped<br>0 MRB<br>Escapes unlikely | ? | ? ? |
| Key Surveillance | Process | Risk | Level | Surveillance | |
| Process | Rationale | Level | Rationale | Techniques | Intensity/Schedule |
| Gyro ? test | Flight<br><br>critical identification | ? | 0 PQDRs 2 YRS<br>0 CARs 2 YRS<br>100 % Yield<br>Escape potential | ? | ? |

# Risk Monitoring

**(Do and Review)**

- **Evaluating Supplier Performance**
  - Perform planned surveillance
  - Independent lab testing
  - Corrective action requests
  - Re-inspection costs
  - Material review board
  - Surveillance at the subcontract level
- **Adjusting Surveillance Frequency/Intensity**
  - Data analysis
  - Adjust and update the risk handling

# Data Analysis, Adjusting Surveillance

- Periodic analysis required
- Records
- Results of analysis
- Surveillance plan adjustments
- Need for customer involvement?

# Surveillance at Subcontract Level

**Prime**

**Sub**
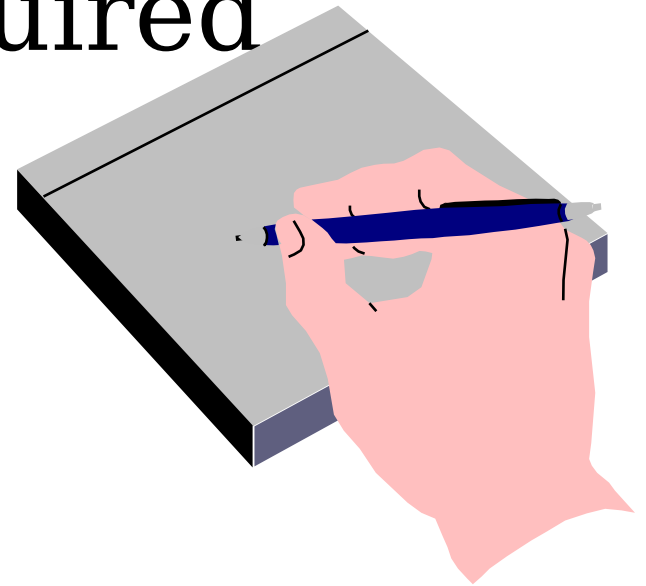


- Request surveillance at subcontract level when necessary

- Contractor PO must require subcontract CAO surveillance

- Clearly state specific surveillance tasks to be performed

# Risk Documentation

**(Records)**

- Records of surveillance efforts
- Any convenient format
- Minimum requirements
  - Who, where, when
  - Nature of observations
  - Number of observations & c
  - Corrective actions initiated
- Additional for process proofin
  - Identify process inputs/outputs
  - Flowchart or sequential list of process steps
  - Narrative description of proofing effort
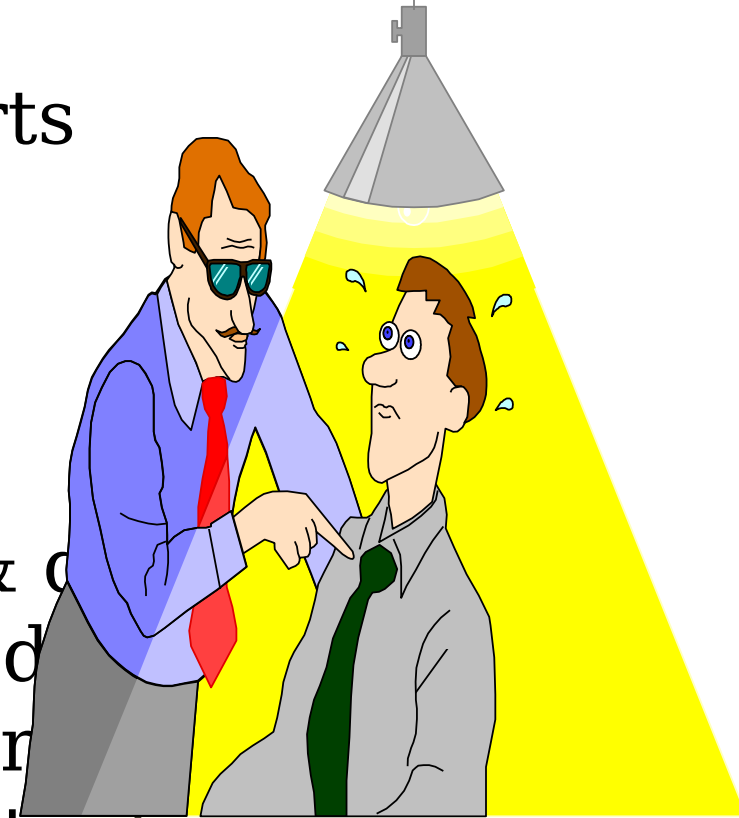
# CARs & CIOs

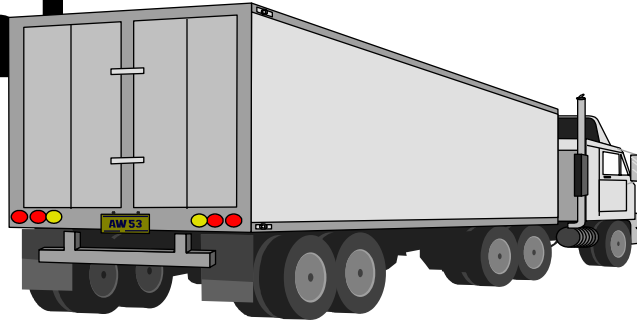## CARs
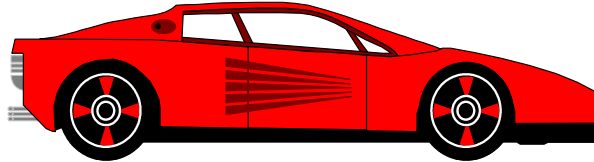


- Contractual noncompliance

- 4 Levels (I, II, II, IV)

## CIOs

- Compliant, but...

- Improvement opportunity

# Authorizing & Accepting Shipment

- Must have confidence in conformance
  - DCMC surveillance based?
  - Data based?
  - CSO/CoC/ARP (based on satisfactory history)?
- Review and sign DD250/other document
  - Intensity based on perceived risks
  - Annotate with signature, title, printed name,                phone number, date,

# Records Retention

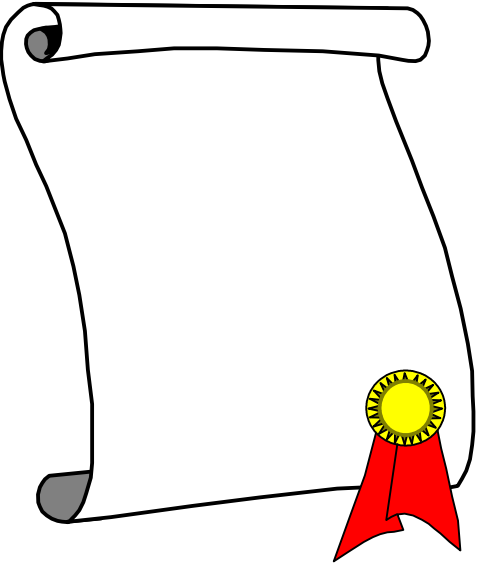- **QA Surveillance Records**
  - 1 years after contract completion (minimum)
  - Longer in some cases
    - Litigation seem likely?
    - Warranty periods?
    - Most recent process proofing records
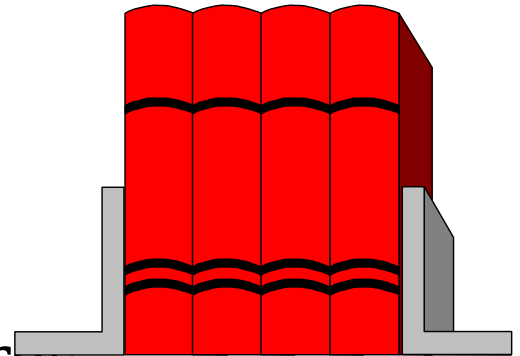
- **QA Surveillance Records**
  - At contract completion, forward important documents to the ACO to put in official file.
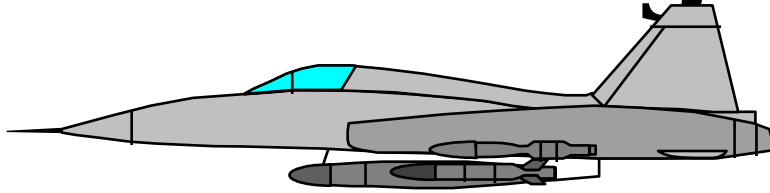
# Competencies and Qualifications

- General
- For Quality System Evaluations
  - Auditors
  - Lead auditors
- For Inspection/acceptance

# Attachment 1
# Flight Critical/Safety of Flight

- Definitions (Flight critical, safety of flight)
- Surveillance
- Flight critical products
- Safety of flight
- New and overhauled aircraft
- SOF examples (fixed and rotary wing, fixed wing, rotary wing)
- FCF/AFC

# Attachment 2
# Commercial Contracts

- DoD:  Go commercial!
- Broader use: Jet engines? Aircraft overhaul? Yes!
- 52.212-4:  Normally **no surveillance permitted before items presented for acceptance**
- Exceptions:  PCO must use contract addendum
- Avoid potential contractor claims!
- DD1716 if source inspection would add no value
- Decision tree in SQA chapter

# Attachment 3
# DESC/MSC Customer Directions

- Attachment avoids numerous QALIs
- Bulk fuel, marine FOB origin loading
  - Inspection requirements/procedures
- Bulk fuel reporting requirements
  - Apply to all modes (railcar, vessel, pipeline, truck, etc)
- Lead agent: Bill Evans, (703) 767-278, DSN427-2787, william_evans@hq.dla.mil

# Attachment 4
# **First Article Testing**

- Supplemental guidance
- Postaward orientation conference?
- Risk planning
- Risk handling
- Recommendations

# Nondestructive Testing (Non-nuclear)

- Non-destructive test policy
  - Tailored to customer
  - Differences in certification / recertificati
  - Training matrices versus Tables

- Roles and responsibilities
  - District Commander
  - NDT Coordinator
  - CAO Commander

# Nondestructive Testing (Non-nuclear)

- Roles and responsibilities
  - CAO First Line Supervisor
  - CAO NDT Administrator / Examiner
  - DCMC In-plant specialist

- Significant NDT policy emphasis
  - NDT processes are always "key" proces
  - Subcontracts: delegate only to certified/
    personnel and only if considered high o
    risk